

RAW SEQUENCE LISTING

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Application Serial Number: 101803,580B
Source: JPM
Date Processed by STIC: 2-22-05

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RAW SEQUENCE LISTING

DATE: 02/22/2005

PATENT APPLICATION: US/10/803,580B

TIME: 15:41:09

Input Set : A:\SYR-HDAC-5005-C2 sub seq list 2.ST25.txt
 Output Set: N:\CRF4\02222005\J803580B.raw

3 <110> APPLICANT: Syrrx, Inc.
 5 <120> TITLE OF INVENTION: HISTONE DEACETYLASE INHIBITORS
 7 <130> FILE REFERENCE: SYR-HDAC-5005-C2
 9 <140> CURRENT APPLICATION NUMBER: US 10/803,580B
 10 <141> CURRENT FILING DATE: 2004-03-17
 12 <150> PRIOR APPLICATION NUMBER: US 60/455,437
 13 <151> PRIOR FILING DATE: 2003-03-17
 15 <150> PRIOR APPLICATION NUMBER: US 60/531,203
 16 <151> PRIOR FILING DATE: 2003-12-19
 18 <160> NUMBER OF SEQ ID NOS: 8
 20 <170> SOFTWARE: PatentIn version 3.2
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 513
 24 <212> TYPE: PRT
 25 <213> ORGANISM: Artificial
 27 <220> FEATURE:
 28 <223> OTHER INFORMATION: Residues 1-482 of HDAC1 with a
 "MSYYHHHHHHDYDIPTTENLYFQGAMEPGGS"
 29 tag at the N-terminus
 31 <400> SEQUENCE: 1
 33 Met Ser Tyr Tyr His His His His His Asp Tyr Asp Ile Pro Thr
 34 1 5 10 15
 37 Thr Glu Asn Leu Tyr Phe Gln Gly Ala Met Glu Pro Gly Gly Ser Met
 38 20 25 30
 41 Ala Gln Thr Gln Gly Thr Arg Arg Lys Val Cys Tyr Tyr Asp Gly
 42 35 40 45
 45 Asp Val Gly Asn Tyr Tyr Gly Gln Gly His Pro Met Lys Pro His
 46 50 55 60
 49 Arg Ile Arg Met Thr His Asn Leu Leu Asn Tyr Gly Leu Tyr Arg
 50 65 70 75 80
 53 Lys Met Glu Ile Tyr Arg Pro His Lys Ala Asn Ala Glu Met Thr
 54 85 90 95
 57 Lys Tyr His Ser Asp Asp Tyr Ile Lys Phe Leu Arg Ser Ile Arg Pro
 58 100 105 110
 61 Asp Asn Met Ser Glu Tyr Ser Lys Gln Met Gln Arg Phe Asn Val Gly
 62 115 120 125
 65 Glu Asp Cys Pro Val Phe Asp Gly Leu Phe Glu Phe Cys Gln Leu Ser
 66 130 135 140
 69 Thr Gly Gly Ser Val Ala Ser Ala Val Lys Leu Asn Lys Gln Gln Thr
 70 145 150 155 160
 73 Asp Ile Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys Lys Ser
 74 165 170 175
 77 Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Ala Ile Leu
 78 180 185 190

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81 Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr Ile Asp Ile Asp Ile
 82 195 200 205
 85 His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp Arg Val
 86 210 215 220
 89 Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly Thr Gly
 90 225 230 235 240
 93 Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys Tyr Tyr Ala Val Asn
 94 245 250 255
 97 Tyr Pro Leu Arg Asp Gly Ile Asp Asp Glu Ser Tyr Glu Ala Ile Phe
 98 260 265 270
 101 Lys Pro Val Met Ser Lys Val Met Glu Met Phe Gln Pro Ser Ala Val
 102 275 280 285
 105 Val Leu Gln Cys Gly Ser Asp Ser Leu Ser Gly Asp Arg Leu Gly Cys
 106 290 295 300
 109 Phe Asn Leu Thr Ile Lys Gly His Ala Lys Cys Val Glu Phe Val Lys
 110 305 310 315 320
 113 Ser Phe Asn Leu Pro Met Leu Met Leu Gly Gly Gly Tyr Thr Ile
 114 325 330 335
 117 Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr Ala Val Ala Leu Asp
 118 340 345 350
 121 Thr Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu Tyr Phe
 122 355 360 365
 125 Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr Asn Gln
 126 370 375 380
 129 Asn Thr Asn Glu Tyr Leu Glu Lys Ile Lys Gln Arg Leu Phe Glu Asn
 130 385 390 395 400
 133 Leu Arg Met Leu Pro His Ala Pro Gly Val Gln Met Gln Ala Ile Pro
 134 405 410 415
 137 Glu Asp Ala Ile Pro Glu Glu Ser Gly Asp Glu Asp Glu Asp Pro
 138 420 425 430
 141 Asp Lys Arg Ile Ser Ile Cys Ser Ser Asp Lys Arg Ile Ala Cys Glu
 142 435 440 445
 145 Glu Glu Phe Ser Asp Ser Glu Glu Glu Gly Gly Arg Lys Asn
 146 450 455 460
 149 Ser Ser Asn Phe Lys Lys Ala Lys Arg Val Lys Thr Glu Asp Glu Lys
 150 465 470 475 480
 153 Glu Lys Asp Pro Glu Glu Lys Lys Glu Val Thr Glu Glu Glu Lys Thr
 154 485 490 495
 157 Lys Glu Glu Lys Pro Glu Ala Lys Gly Val Lys Glu Glu Val Lys Leu
 158 500 505 510
 161 Ala
 165 <210> SEQ ID NO: 2
 166 <211> LENGTH: 1542
 167 <212> TYPE: DNA
 168 <213> ORGANISM: Artificial
 170 <220> FEATURE:
 171 <223> OTHER INFORMATION: DNA sequence encoding residues 1-482 of HDAC1 with a
 172 "MSYYHHHHHDYDIPPTENLYFQGAMEPGGS" tag at the N-terminus
 174 <400> SEQUENCE: 2

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175	atgtcgta	ccatcacca	tcaccatcac	gattacgata	tcccaacgac	cgaaaacctg	60		
177	tat	ttcagg	gcccatttgc	acc	ccccgggg	tccatggcgc	120		
179	aaagtctgtt	actactacga	cggggatgtt	gga	aaattact	attatggaca	180		
181	atgaaggc	tc	accgaatccg	catgactcat	aatttgc	tcaactatgg	240		
183	aaaatggaa	tctatgc	ccc	tcacaaagcc	aatgtg	aggatgaccaa	300		
185	gtgactaca	ttaaatttctt	g	cgctccatc	cg	tccagata	360		
187	cagatgcaga	gattcaacgt	ttgtgaggac	tgtccag	t	tcgatggc	420		
189	tgtcagttgt	ctactgg	ttctgtggc	agtgtgtga	aacttaataa	gcagcagacg	480		
191	gacatcg	ctg	tgaattggc	tggggc	caccatg	caa	agaagtccg	540	
193	ttctgttac	g	caatgat	atc	cttgg	gac	tgctaaagta	600	
195	gtgctgtaca	ttgacattga	tattc	accat	ggtg	acgg	tggaagaggc	660	
197	acggaccggg	tcatgactgt	gtc	cttcat	aagtatgg	ag	acttccc	720	
199	gac	ctacggg	at	atcggg	gg	caaaggc	780		
201	gac	gggattt	atgac	gagtc	ctatg	aggcc	at	ttcaagc	840
203	gagatgttcc	agc	cttgc	gtgttctt	c	agactcc	c	atctgggat	900
205	cgtttaggtt	g	cttcaat	ct	aactat	caa	ggacacg	960	
207	agctttaacc	tgc	c	ctatgttgc	g	gcgttgg	t	acaccattcg	1020
209	cgt	gctg	g	ga	cat	ttc	g	taacgttgc	1080
211	tacaatgact	act	tttgc	at	tttgc	accat	tc	tc	1140
213	atgactaacc	aga	acacg	aa	t	gat	tttgc	tttgc	1200
215	cttagaatgc	tg	ccgcac	gc	ac	cttgg	gg	acgc	1260
217	cctgaggaga	gt	ggc	gat	g	gac	g	ac	1320
219	tctgacaaac	ga	atttgc	ct	gag	tttgc	ct	gag	1380
221	ggccgcaaga	act	tttcc	aa	tttcc	aa	tttcc	aa	1440
223	gagaaaagacc	cag	agg	gag	aa	agg	agg	aa	1500
225	ccagaagcca	aa	gggg	tttgc	aa	gggg	gg	gggg	1542

228 <210> SEQ ID NO: 3

229 <211> LENGTH: 498

230 <212> TYPE: PRT

231 <213> ORGANISM: Artificial

233 <220> FEATURE:

234 <223> OTHER INFORMATION: Residues 1-488 of HDAC2 with a "GHHHHHH" tag at the C-terminus.

235 and a "MGS" tag at the N-terminus

237 <400> SEQUENCE: 3

239	Met	Gly	Ser	Met	Ala	Tyr	Ser	Gln	Gly	Gly	Gly	Lys	Lys	Lys	Val	Cys
240	1							5		10					15	
243	Tyr	Tyr	Tyr	Asp	Gly	Asp	Ile	Gly	Asn	Tyr	Tyr	Tyr	Gly	Gln	Gly	His
244							20		25					30		
247	Pro	Met	Lys	Pro	His	Arg	Ile	Arg	Met	Thr	His	Asn	Leu	Leu	Leu	Asn
248		35						40				45				
251	Tyr	Gly	Leu	Tyr	Arg	Lys	Met	Glu	Ile	Tyr	Arg	Pro	His	Lys	Ala	Thr
252		50					55			60						
255	Ala	Glu	Glu	Met	Thr	Lys	Tyr	His	Ser	Asp	Glu	Tyr	Ile	Lys	Phe	Leu
256	65				70					75				80		
259	Arg	Ser	Ile	Arg	Pro	Asp	Asn	Met	Ser	Glu	Tyr	Ser	Lys	Gln	Met	Gln
260					85				90				95			
263	Arg	Phe	Asn	Val	Gly	Glu	Asp	Cys	Pro	Val	Phe	Asp	Gly	Leu	Phe	Glu
264		100						105				110				
267	Phe	Cys	Gln	Leu	Ser	Thr	Gly	Gly	Ser	Val	Ala	Gly	Ala	Val	Lys	Leu

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268	115	120	125
271	Asn Arg Gln Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His		
272	130	135	140
275	His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile		
276	145	150	155
279	160	165	170
280	Val Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr		
283	175	180	185
284	Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr		
287	190	195	200
288	Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr		
291	205	210	215
292	Phe Pro Gly Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys		
295	220	225	230
296	Tyr Tyr Ala Val Asn Phe Pro Met Arg Asp Gly Ile Asp Asp Glu Ser		
299	240	235	245
300	Tyr Gly Gln Ile Phe Lys Pro Ile Ile Ser Lys Val Met Glu Met Tyr		
303	255	245	250
304	Gln Pro Ser Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly		
307	270	260	265
308	Asp Arg Leu Gly Cys Phe Asn Leu Thr Val Lys Gly His Ala Lys Cys		
311	285	275	280
312	Val Glu Val Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly		
315	300	290	295
316	Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr		
319	320	305	310
320	315	325	330
323	335	340	345
324	Tyr Phe Glu Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser		
327	350	355	360
328	365	370	375
331	380	385	390
332	320	330	335
335	400	395	405
336	410	390	410
339	415	380	415
340	420	405	425
343	430	420	425
344	440	435	440
347	445	435	440
348	455	440	445
351	460	450	455
352	475	460	475
355	480	475	480
356	495	465	470
359	495	485	490
360	His His	485	490
363	495	495	495
367	<210> SEQ ID NO: 4		

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368 <211> LENGTH: 1497
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial
372 <220> FEATURE:
373 <223> OTHER INFORMATION: DNA sequence encoding residues 1-488 of HDAC2 with a "GHHHHHH"

374 tag at the C-terminus and a "MGS" tag at the N-terminus
376 <400> SEQUENCE: 4

377 atggatcca	tggctacag	tcaaggagc	ggcaaaaaaa	aagtctgcta	ctactacgac	60
379 ggtgatattt	gaaatttata	ttatggacag	ggtcatccca	tgaagcctca	tagaatccgc	120
381 atgaccata	acttgcgtt	aaattatggc	ttatacagaa	aatggaaat	atataggccc	180
383 cataaagcca	ctgccaaga	aatgacaaaa	tatcacagt	atgagtatat	caaatttcta	240
385 cggtaataa	gaccagataa	catgtcttag	tatactaagc	agatgcagag	atthaatgtt	300
387 ggagaagatt	gtccagtgtt	tgatggactc	ttttagttt	gtcagctctc	aactggcggt	360
389 tcagttctg	gagctgtgaa	gttaaaccga	caacagactg	atatggctgt	taattgggct	420
391 ggaggattac	atcatgctaa	gaaatcagaa	gcatcaggat	tctgttacgt	taatgatatt	480
393 gtgcttgcca	tccttgaatt	actaaagtat	catcagagag	tcttatatat	tgtatagat	540
395 attcatcatg	gtgatgtgt	tgaagaagct	ttttatacaa	cagatcgtgt	aatgacggta	600
397 tcattccata	aatatgggaa	atactttcct	ggcacaggag	acttgaggg	tattgggtgt	660
399 gaaaaaggca	aatactatgc	tgtcaatttt	ccaatgagag	atggtataga	tgtgagtca	720
401 tatgggcaga	tatttaagcc	tattatctca	aaggtgatgg	agatgtatca	acctagtgt	780
403 gtggattac	agtgtgtgtc	agactcatta	tctggtata	gactgggtt	tttcaatcta	840
405 acagtcaaag	gtcatgctaa	atgtgtagaa	gttgaaaaaa	cttttaactt	accattactg	900
407 atgcttggag	gagggtgcta	cacaatccgt	aatgttgctc	gatgttgac	atatgagact	960
409 gcagttgcc	ttgattgtga	gattcccaat	gagttgccat	ataatgatta	ctttgagtat	1020
411 ttggaccag	acttcaaact	gcatattagt	ccttcaaaca	tgacaaacca	gaacactcca	1080
413 gaatatatgg	aaaagataaa	acagcgttt	tttggaaaatt	tgcgcatgtt	acctcatgca	1140
415 cctgggttcc	agatgcaagc	tattccagaa	gatgctgtc	atgaagacag	tggagatgaa	1200
417 gatggagaag	atccagacaa	gagaatttct	attcgagcat	cagacaagcg	gatagctgt	1260
419 gatgaagaat	tctcagattc	tgaggatgaa	ggagaaggag	gtcgaagaaa	tgtggctgat	1320
421 cataagaaag	gagcaagaa	agctagaatt	gaagaagata	agaaagaaac	agaggacaaa	1380
423 aaaacagacg	ttaagaaga	agataaaatcc	aaggacaaca	gtggtaaaaa	aacagatacc	1440
425 aaaggaacca	aatcagaaca	gctcagcaac	cccgggcac	accatcacca	tcactaa	1497

428 <210> SEQ ID NO: 5
429 <211> LENGTH: 782
430 <212> TYPE: PRT
431 <213> ORGANISM: Artificial
433 <220> FEATURE:
434 <223> OTHER INFORMATION: Residues 73-845 of HDAC6 with a "GHHHHHH" tag at the C-terminus

435 and a "MP" tag at the N-terminus

437 <400> SEQUENCE: 5

439 Met	Pro	Gly	Met	Asp	Leu	Asn	Leu	Glu	Ala	Glu	Ala	Leu	Ala	Gly	Thr
440 1				5				10						15	
443 Gly	Leu	Val	Leu	Asp	Glu	Gln	Leu	Asn	Glu	Phe	His	Cys	Leu	Trp	Asp
444								25						30	
447 Asp	Ser	Phe	Pro	Glu	Gly	Pro	Glu	Arg	Leu	His	Ala	Ile	Lys	Glu	Gln
448								35						45	
451 Leu	Ile	Gln	Glu	Gly	Leu	Leu	Asp	Arg	Cys	Val	Ser	Phe	Gln	Ala	Arg
452								50						60	
455 Phe	Ala	Glu	Lys	Glu	Glu	Leu	Met	Leu	Val	His	Ser	Leu	Glu	Tyr	Ile

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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8

VERIFICATION SUMMARY

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